

INVITATION TO BID	CITY OF BATON ROUGE PARISH OF EAST BATON ROUGE PURCHASING DIVISION	RESPONSES MUST BE RECEIVED BY: 05/16/2022 11:00 AM CST
TITLE: M03875 Ephesus Lighting for B. R. Raising Canes River Center		RETURN BID TO: PURCHASING DIVISION
FILE NO: 22-03875 REQ NO: 3875	Mailing Address: PO Box 1471 Baton Rouge, LA 70821 Physical Address: 222 St. Louis Street 8 th Floor Room 826 Baton Rouge, LA 70802 **NOTE: U.S. Postal Regular & Expedited Mail do not deliver to our physical address; delays may occur due to City Parish Mailroom processing.	
AD DATES: 04/28/2022 & 05/05/2022		
SHIP TO ADDRESS: Raising Canes River Center 275 South River Road Baton Rouge, LA 70802	Contact Regarding Inquiries: Purchasing Analyst : Mark W. White Telephone Number: 225-389-3259 x 3268 Email: mwhite@brla.gov	
VENDOR NAME	MAILING ADDRESS	
REMIT TO ADDRESS	CITY, STATE, ZIP	
TELEPHONE NO. FAX NO.	E-MAIL	
FEDERAL TAX ID OR SOCIAL SECURITY NUMBER	TITLE	
AUTHORIZED SIGNATURE (REQUIRED)	PRINTED NAME	
QUESTIONS TO BE COMPLETED BY VENDOR: 1. _____ STATE DELIVERY DAYS MAXIMUM AFTER RECEIPT OF ORDER 2. _____ % discount for payment made within 30 days. Discount for payment made in less than 30 days, or less than 1%, or applicable to an indefinite quantity contract will be accepted but not an award consideration. 3. _____ STATE ENUMERATED ADDENDA RECEIVED (IF ANY)		

F.O.B.: DESTINATION - PAYMENT TERMS: NET 30

ALL BLANKS ON THIS PAGE SHOULD BE COMPLETED TO AVOID REJECTION OF BID

The signature on this document certifies that proposer has carefully examined the instructions to bidders, terms and specifications applicable to, and made a part of this solicitation. By submission of this document, proposer further certifies that the prices shown are in full compliance with the conditions, terms and specifications of this solicitation. **Bid must be signed in the designated space above and by person authorized to sign for bidder.**

No alterations, changes or additions are allowed on this solicitation, and no additional information, clarifications or other documents are to be included unless specifically required by the specification. Any errors in extensions of prices will be resolved in favor of unit prices submitted.

If services are to be performed in East Baton Rouge City-Parish, evidence of a current occupational license and/or permit issued by the City-Parish shall be supplied by the successful vendor, if applicable.

INSTRUCTIONS TO BIDDERS / TERMS & CONDITIONS - SEALED BIDS

Bidders are urged to promptly review the requirements of this specification and submit questions for resolution as early as possible during the bid period. Questions or concerns must be submitted in writing to the purchasing division during the bid period. Otherwise, this will be construed as acceptance by the bidders that the intent of the specifications is clear and that competitive bids may be obtained as specified herein. Protests with regard to the specification documents will not be considered after bids are opened.

1. Read the entire bid, including all terms and conditions and specifications.
2. Bids are mailed only as a courtesy. The City - Parish does not assume responsibility for failure of bidders to receive bids. Bidders should rely only on advertisements in the local newspaper, and should personally pick up bids and specifications. Full information may be obtained, or any questions answered, by contacting the Purchasing Division, 222 Saint Louis Street, 8th Floor, Room 826, Baton Rouge, LA 70802 or by calling (225) 389-3259.
3. The bid number, bidder's name, address and bid opening date should be clearly printed or typed on the outside of the bid envelope. Only one bid will be accepted from each bidder for the same job. Alternates will not be accepted unless specifically requested in the proposal. Submission of more than one bid or alternates not requested may be grounds for rejection of all bids by the bidder.
4. The method of delivery of bids is the responsibility of the bidder. All bids must be received by the Purchasing Division on or before the specified bid opening date and time. Late bids will not be considered under any circumstances.
5. Failure to deliver within the time specified in the bid will constitute a default and may cause cancellation of the contract. Where the city has determined the contractor to be in default, the city reserves right to purchase any or all products or services covered by the contract on the open market and to charge the contractor with cost in excess of the contract price. Until such assessed charges have been paid, no subsequent bid from the defaulting contractor will be considered.
6. The City Parish specifically reserves the right to evaluate bids and award items separately, grouped or on an all or none basis, to accept the bid which is in the best interest of the City parish, and to reject all proposals if that is in the best interest of the City Parish.
7. Except for bids submitted through the www.bidexpress.com on-line bidding site, bids shall be accepted only on bid forms furnished by the City of Baton Rouge and Parish of East Baton Rouge Purchasing Division. Altered or incomplete bids (including non-acknowledgement of addenda issued, if any), or the use of substitute forms or documents, shall render the bid non-responsive and subject to rejection.
8. All bids must be typed or written in ink. Any erasures, strikeover and/or changes to prices should be initialed by the bidder. Failure to initial may be cause for rejection of the bid as non-responsive.
9. All bids must be manually signed by a properly authorized party. Failure to do so shall cause the bid to be rejected as non-responsive.
10. Where one or more vendor's exact products or typical workmanship is designated as the level of quality desired or equivalent, the Purchasing Division reserves the right to determine the acceptability of any equivalent offered.
11. Detailed factory specifications, illustrative literature and any deviations should be submitted with bid as required by the specifications or on the bid form. Representative samples shall be submitted upon request, if appropriate. Bidders proposing an equivalent brand or model should submit with the bid information (such as illustrations, descriptive literature, and technical data) sufficient for the City to evaluate quality, suitability, and compliance with the specifications in the solicitation.

12. Written addenda issued prior to bid opening which modifies the bid shall become a part of the bid, and shall be incorporated within the purchase order and/or contract. Only a written interpretation or correction by Addendum shall be binding. Bidders shall not rely upon any interpretation or correction given by any other method. Failure to acknowledge receipt of addenda (if any) shall render the bid non-responsive and subject to rejection.
13. For Printing solicitations, artwork, dies and/or molds shall become the property of the City - Parish Government and must be returned to the Purchasing Division, 222 Saint Louis Street, 8th Floor, Room 826, Baton Rouge, LA 70802, upon completion of the order.
14. All applicable chemicals, herbicides, pesticides and hazardous materials must be registered for sale in Louisiana by the Department of Agriculture, State of Louisiana, registered with the EPA and must meet all requirements of Louisiana State Laws. Bidders must submit product label, material safety data sheet and EPA registry number with bid. This information will be required on any subsequent deliveries if there is a change in chemical content or a different product is being supplied. Failure to submit this data may be cause for the bid to be rejected or the contract canceled.
15. Delivery of items must be made on time to City - Parish final destinations within East Baton Rouge Parish. All freight charges shall be prepaid by vendor. Late deliveries or unsatisfactory performance may be cause to cancel the Purchase Order or contract.
16. The State of Louisiana Code of Governmental Ethics places restrictions on awarding contracts or purchase orders to persons who are employed by any agency of the City - Parish Government, or any business of which he or his spouse has more than a twenty-five percent (25%) interest. The Code also prescribes other restrictions against conflict of interest and establishes guidelines to assure that appropriate ethical standards are followed. If any question exists regarding potential violation of the Code of Ethics, bidders should contact the Purchasing Division prior to submission of the bid. Any violation of the Code of Ethics shall be grounds for disqualification of bid or cancellation of contract.
17. All Prices bid shall remain in effect for a period of at least sixty (60) days. City - Parish purchases are excluded from state and local taxes.
18. Acceptance of award by vendor, either in writing or by shipment of any article described herein, shall effectuate a contract between City - Parish and vendor for the materials described herein, and no additional conditions or amendments shall have any effect unless approved in writing by City - Parish.
19. Bidders may attend the bid opening, but no information or opinions concerning the ultimate contract award will be given at the bid opening or during the evaluation process. Information pertaining to completed files may be secured by visiting the EBR City Parish Purchasing office during normal working hours.
20. The City - Parish is an equal opportunity employer, and does not discriminate against anyone on the basis of race, sex, creed, color, religion, national origin, ancestry, reprisal, disability, sexual orientation, marital status or political affiliation.
21. In accordance with Louisiana Revised Statutes, a preference may be allowed for equivalent products produced, manufactured or grown in Louisiana and/or firms doing business in the State of Louisiana. Do you claim this preference if allowed?

YES ____ NO _____. If this preference is claimed, attach substantiating information to the proposal to show the basis for the claim.
22. Right To Audit Clause: The Contractor shall permit the authorized representative of the City-Parish to periodically inspect and audit all data and records of the Contractor relating to his performance under this contract.

23. Terms and Conditions: This solicitation contains all terms and conditions with respect to the purchase of the goods and/or services specified herein. Submittal of any contrary terms and conditions may cause your bid to be rejected. By signing and submitting a bid, vendor agrees that contrary terms and conditions which may be included in their bid are nullified; and agrees that this contract shall be construed in accordance with this solicitation and governed by the laws of the State of Louisiana as required by Louisiana Law.
24. In accordance with the provisions of LA. R.S. 38:2212.9, in awarding contracts after August 15, 2010, any public entity is authorized to reject the lowest bid from, or not award the contract to, a business in which any individual with an ownership interest of five percent or more has been convicted of, or has entered a plea of guilty or ***Nolo Contendere*** to any state felony crime or equivalent federal felony crime committed in the solicitation or execution of a contract or bid awarded under the laws governing public contracts under the provisions of Chapter 10 of this Title, professional, personal, consulting, and social services procurement under the provisions of Chapter 16 of Title 39 of the Louisiana Revised Statutes of 1950, or the Louisiana Procurement Code under the provisions of Chapter 17 of Title 39 of the Louisiana Revised Statutes of 1950.
25. Certification of no suspension or debarment. By signing and submitting any bid for \$25,000 or more, the bidder certifies that their company, any subcontractors, or principals are not suspended or debarred by the general services administration (GSA) in "Audit Requirements In subpart F of the Office of Management and Budget's uniform administrative requirements, cost principles, and audit requirements for federal awards" (Formerly OMB circular a-133).
- A list of parties who have been suspended or debarred can be viewed via the internet at <http://www.sam.gov>.
26. Bid prices shall include delivery of all items F.O.B. destination or as otherwise provided. Bids containing "Payment in Advance" or "C.O.D. requirements may be rejected. Payment is to be made within 30 days after receipt of properly executed invoice or delivery, whichever is later.
27. Bidders may attend the bid opening, but no information or opinions concerning the ultimate contract award will be given at the bid opening or during the evaluation process. Bids may be examined within 72 hours after bid opening. Information pertaining to completed files may be secured by visiting the Purchasing Division during normal working hours. Written bid tabulations may be accessed at: <http://city.brla.gov/dept/purchase/bidresults.asp>.
28. Contractor agrees, upon receipt of written notice of a claim of a claim or action, to defend the claim or action, or take other appropriate measure, to indemnify, and hold harmless, the city, its agents and employees from and against all claims and actions for bodily injury, death or property damages caused by fault of the contractor, its officers, its agents, or its employees. Contractor is obligated to indemnify only to the extent of the fault of the contractor, its officers, its agents, or its employees, however the contractor shall have no obligation as set forth with respect to any claim or action from bodily injury, death or property damages arising out of the fault of the City, its officers, its agents, or its employees.
29. In accordance with Louisiana Law (R.S. 12:262.1 and 12:1308.2), all corporations and limited liability companies must be in good standing with the Louisiana Secretary of State at the time of execution of the contract.
30. Vendors submitting signed bids agree to EEOC compliance and certify that they agree to adhere to the mandates dictated by Title VI and VII of the Civil Right Act of 1964, as amended by the Equal Opportunity Act of 1972, Federal Executive Order 11246, the Federal Rehabilitation Act of 1973, as amended, the Vietnam Era Veteran's Readjustment Assistance Act of 1974, Title IX of the Education Amendments of 1972, the Age Act of 1975, and agrees to abide by the requirements of the Americans with Disabilities Act of 1990.

Bidders must agree to keep informed of and comply with all federal, state and local laws, ordinances and regulations which affect their employees or prospective employees.

31. The City of Baton Rouge, Parish of East Baton Rouge launched a new Enterprise Resource Planning (ERP) system, Vendor Self Service (VSS) via Munis. VSS replaced the legacy vendor database and will be used by all departments and agencies citywide.

Vendor Self-Service (VSS) enables vendors to register and maintain information about their organization for the purpose of doing business with City-Parish and receive notifications of business opportunities. The City-Parish procurement activities are subject to the State of Louisiana Public Bid Law, local city-parish ordinances as well as applicable federal statutes as directed by grant providers. Vendors must be registered to receive bid notifications.

New vendors or existing vendors who need to create a VSS account can do so clicking the Registration link at <http://brla.gov/vss>. Vendors are encouraged to review the step by step <https://www.brla.gov/DocumentCenter/View/4899/Vendor-Self-Service-Registration-Guide-PDF> before beginning the registration process which may be assessed at <https://www.brla.gov/DocumentCenter/View/4899/Vendor-Self-Service-Registration-Guide-PDFide>.

Additional information regarding how to do business with EBR City-Parish is available at: <https://www.brla.gov/DocumentCenter/View/678>.

We also post our scheduled bid openings, as well as unofficial bid tabulations after the bids have opened at <http://city.brla.gov/dept/purchase/bids.asp>.

Note: Commodity codes are required for setting up your profile. These numbers tell us what commodities and services that you can provide. When agencies request products or services, our buyers pull directly from these numbers to send out solicitations, bids, and quotes. The first 3 numbers are the class numbers; the subclasses are two digit numbers that better describe the commodity or service. For questions regarding commodity codes, please contact purchasing at (225) 389-3259 Ext 0.

Important! - A W-9 Form is required in order to do business with City-Parish. Part of the online enrollment process requires you to upload a completed W-9 form. Please have the completed form in an electronic format so that you can submit it as part of the registration process. The W-9 form can be downloaded from the IRS website. We have created step by step directions on how to properly complete the W-9 Form.

FEDERAL CLAUSES, IF APPLICABLE

I. Remedies for Breach

Bidder acknowledges that contracts in excess of the simplified purchase threshold (\$150,000.00) shall contain provisions allowing for administrative, contractual, or legal remedies for contractor breaches of the contract terms, and shall provide for such remedial actions as appropriate.

II. Termination and Settlement

Bidder acknowledges that contracts in excess of \$10,000.00 shall contain termination provisions including the manner in which termination shall be effected and the basis for settlement. In addition, such provisions shall describe conditions for termination due to fault and for termination due to circumstances outside of the contractors' control.

III. Access to Records

Bidder acknowledges that all contracts (except those for less than the small purchase threshold) shall include provisions authorizing the recipient, US Funding Agency, the Comptroller General, or any of their duly authorized representatives access to all books, documents, papers, and records of the contractor which are directly pertinent to a specific program for the purpose of making audits, examinations, excerpts, and transcriptions.

IV. Equal Employment Opportunity

Bidder acknowledges that all contracts shall contain provisions requiring compliance with

E.O. 11246, "Equal Employment Opportunity," as amended by E.O. 11375, "Amending Executive Order 11236 Relating to Equal Employment Opportunity," and as supplemented by regulations at 41 CFR part 60, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Dept. of Labor.

V. Copeland "Anti-Kickback" Act

Bidder acknowledges that all construction/repair contracts and sub-grants in excess of \$2,000 shall include provisions requiring compliance with the Copeland "Anti-kickback" Act (18 U.S.C. §3141-3148), which provides that each contractor or sub-recipient shall be prohibited from inducing any person employed in the construction, completion, or repair of public work, to give up any part of the entitled.

VI. Davis-Bacon Act

Bidder acknowledges that all construction contracts in excess of \$2,000 shall include a provision for compliance with the Davis-Bacon Act, which requires contractors to pay laborers and mechanics wages at a rate not less than the minimum wages specified in a wage determination made by the Secretary of Labor. Additionally, contractors shall be required to pay wages not less than once a week.

VII. Contract Work Hours and Safety Standards Act

Bidder acknowledges that all construction contracts in excess of \$2,000, and all other contracts involving the employment of mechanics or laborers in excess of \$2,500 shall include provisions for compliance with sections 102 and 107 of the Contract Work Hours and Safety Standards Act, which requires each contractor to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and one-half times the basic rate of pay for all hours worked in excess of 40 hours. Section 107 is applicable to construction work and provides that no laborer or mechanic shall be required to work in surroundings or under working conditions that are unsanitary, hazardous, or dangerous.

VIII. Rights to Inventions Made Under a Contract or Agreement

Bidder acknowledges that contracts for the performance of experimental, developmental, or research work shall include provisions providing for the rights of the Federal Government and the recipient in any resulting invention in accordance with 37 CFR part 401, "Rights to Inventions Made by Nonprofit Organizations and the Small Business Firms Under Governments Grants, Contracts, and Cooperative Agreements"

IX. Clean Air Act

Bidder acknowledges that the Clean Air Act (CAA) is the comprehensive federal law regulating air emissions from stationary and mobile sources. Among other things, this law authorizes EPA to establish National Ambient Air Quality Standards (NAAQS) to protect public health and public welfare and to regulate emissions of hazardous air pollutants

X. Clean Water Act.

The contractor hereby agrees to adhere to the provisions which require compliance with all applicable Standards, orders, or requirements issued under section 508 of the clean water act which prohibits the use under non-exempt Federal contracts, grants or loans of facilities included on the EPA list of violating facilities

XI. Energy policy and conservation act

The contractor hereby recognizes the mandatory standards and policies relating to energy Efficiency which is contained in the state energy conservation plan issued in compliance with the energy policy and Conservation act (P.L. 94-163).

Bidders must agree to keep informed of and comply with all federal, state and local laws, ordinances and regulations which affect their employees or prospective employees.

INQUIRY PERIOD

An inquiry period is hereby firmly set for all interested bidders to perform a detailed review of the bid documents and to submit any written questions relative thereto. Without exception, all questions must be in writing and received **by 5:00 p.m. C.S.T. on May 06, 2022**. Inquiries shall not be entertained thereafter. Inquiries are to be directed as follows:

Hand Delivered or by Courier

Mark W. White, Purchasing Analyst
City-Parish Purchasing Department
222 St. Louis Street, Room 826
Baton Rouge, LA 70802

Delivery by United States Postal Services

Mark W. White, Purchasing Analyst
City-Parish Purchasing Department
P. O. Box 1471
Baton Rouge, LA 70821

By email: mwhite@brla.gov

The City-Parish shall not and cannot permit an open-ended inquiry period, as this creates an unwarranted delay in the procurement cycle and operations of our departments. The City-Parish reasonably expects and requires *responsible and interested* proposers to conduct their in-depth proposal review and submit inquiries in a timely manner.

An Addendum will be sent out no later than 3 days prior to the deadline for receiving quotes, for all questions submitted in writing by the close of the inquiry period.

SITE VISITS

Site Visits for this project at the Raising Canes River Center are by Appointment **ONLY**. Please contact Curtis Appleby at 225-953-1692 (cappleby@asmbatonrouge.com) for your appointment.

Specifications

SPORTS LIGHTING SYSTEM

PART 1 – GENERAL

SUMMARY

The purpose of these specifications is to define the lighting system performance and design standards for LED Lighting Systems. The manufacturer / contractor shall supply the lighting systems to meet or exceed the standards set forth in these specifications.

- A. APPLICATION: The lighting system will be for the following venue(s):
 - 1. Raising Cane's River Center Arena
- B. PRIMARY GOALS of this lighting project are:
 - 1. Provide an adaptable lighting system: solution will provide the ability to upgrade over time to meet evolving needs of the facility to include dimming, CCT tuning, beam tuning, integral RGBA color flooding, continuous health monitoring, two-way communication, individual fixture control and firmware/software upgradeable.
 - 2. Maintain light levels: selection of appropriate light levels impact the safety of the players and the enjoyment of spectators. Therefore, specified minimum average illumination must be maintained for a period of 10 years.
 - 3. Life-cycle cost: In order to reduce operating costs, the preferred lighting system shall be energy efficient and cost effective to operate. Accordingly, efficacy should be a minimum of 115 lumens/watt between 4000K-5600K.
 - 4. Control and monitoring: the control and monitoring system shall be based on streaming ACN internet protocols (IP) which provides individual fixture control and on-site scene building capability. In addition, controls capable of on/off/dim and individual light control to reduce energy consumption.
 - 5. House control systems: ability to connect with in house facility controls.
 - 6. Design Validation: Manufacturer shall provide IES files for design verification and consultation

1.2 LIGHTING PERFORMANCE

- A. Illumination levels and design factors:
Playing surfaces shall be lit to an average target illumination level and uniformity as specified in the chart below. Lighting calculations shall be developed, and field measurements taken on the grid spacing with the minimum number of grid points specified below. Appropriate light loss factors shall be applied and submitted for the basis of design. Average illumination level shall be measured in accordance with the IESNA LRP-6-01 (IESNA Sports and Recreational Area Lighting).

Area of Lighting	Average Horizontal Illumination	Horizontal Uniformity	Average Vertical Main Illumination	Vert. Main Uniformity	Average Vertical End Illumination	Vert. End Uniformity	Grid Points	Grid Spacing
Basketball	113 FC	1.1:1	94 FC	1.5:1	64 FC	1.3:1	60	10'x10'
Floor	104 FC	1.4:1	N/A	N/A	N/A	N/A	171	10'x10'
Seating	23 FC	6:1	N/A	N/A	N/A	N/A	520	10'x10'

- B. Color Temperature: Each Individual fixture within the system shall have a color temperature tuning from 3000K-6500K and a CRI greater than 80.
- C. TLCI>70
- D. Full Range Dimming from 1% to 100%, 0% being off.
- E. Maintaining Lumen output between 4000K-5600K
- F. RGBA color capability integral to each fixture with greater than 10% of white light output.
- G. Electronic beam tuning capability from NEMA 3-5 or NEMA 5-7 defined angles

- H. Lumens less than 50K
- I. Individual light source control with hybrid TIR and reflector technology for glare control.
- J. Optional Fixture level glare control using engineered diffuser technology
- K. Optional fixture visor to reduce glare and spill/cut off requirements.
- L. Ability to change individual fixture beam angle through control system
- M. Photometric Report: a photometric design that shows aiming points of each luminaire shall be provided to demonstrate the capability of achieving the specified performance.

PART 2 – PRODUCT

2.1 SPORTS LIGHTING SYSTEM DESIGN AND CONSTRUCTION

- A. Luminaire.
The luminaire shall meet the following specifications:
 - 1. General:
 - a. UL Certified for wet locations
 - b. Operating temperature range rating between -40°C and +50°C
 - c. 3rd-party NEMA 4X certified based on NEMA 250 standards for external icing, hose-down, and 200-hours salt spray test,
 - d. 2000hr Salt Fog Corrosion testing per ASTM B-117
 - e. 3rd-party tested and certified to ANSI C136.31, 3G vibration requirements.
 - f. IP66 certified tested to IEC 60598-1 standards to meet dust-tight and powerful water jet-proof test
 - g. Weigh less than 35lbs, including integral power supply
 - h. Effective projected area (EPA) of the fixture less than 1.4 ft²
 - i. Luminaire housing color option of white or black
 - 2. Lighting capability:
 - a. Correlated Color Temperature (CCT) Tuning between 3000K-6500K with maintained lumen output between 4000K and 5600K (tolerance of ±200K)
 - b. Color Rendering Index (CRI) of >80
 - c. Television Lighting Consistency Index (TLCI) >70
 - d. Electronic beam tuning from NEMA 3-5 or NEMA 5-7
 - e. Integrated Red, green, blue and amber LED lighting >10% white light output
 - f. Red, green, blue and amber LEDs of pure color, not phosphor converted
 - g. L70 lumen depreciation rating, greater than 100,000 hours
 - h. Verified to be flicker free at super slow motion speeds with a flicker percentage of <.01% across the full diming range from 0-100%
 - 3. Power supply:
 - a. Integral and thermally isolated
 - b. Single power supply (driver) per fixture
 - c. Wide input range of 120VAC-240VAC or 277VAC-480VAC
 - d. Efficiency greater than 93% with full load applied
 - e. Power factor greater than 0.90 with full load applied.
 - f. Total Harmonic Distortion (THD) less than 20% with full load applied.
 - g. Hold up time greater than 8m/sec typ.
 - h. Thermal sensors to monitor temperature readings of critical components, and self-protected when conditions exceeded, and report conditions wirelessly to remote site
 - i. Ultra-low standby power of less than 1% standby power consumed with primary output disabled
 - j. No remote ballast solutions are permitted because of parasitic power consumption and high installation costs.
 - 4. Optics and lensing:
 - a. Luminaire shall consist of a TIR (Total Internal Reflection) and reflector optical system for glare control. The TIR portion shall be UV Stable, optical grade silicone lensing to eliminate lens degradation over time.
 - b. Luminaire exit surface shall incorporate engineered diffuser technology to homogenize light and reduce glare perception.
 - c. Internal optic control and external visors to minimize glare on the playing surface

5. Integrated Sensors:
 - a. Fixture ambient
 - b. Power supply temperature
 - c. Pressure
 - d. Humidity
 - e. Integrated accelerometer and magnetometer for aiming, commissioning, and feedback on light positioning.
 - f. Signal strength
 - g. Power Monitoring that includes
 - Real Power Draw
 - THD
 - Power Factor
 - Input Voltage
6. Construction
 - a. Luminaire shall be constructed as a single pressure cavity vessel system
 - b. Enclosure shall include a breathable vent for pressure fluctuation reduction and increased seal life
 - c. Aluminum shall be chromate conversion coated and then two-stage architectural grade powder- coated for long term resistance to corrosion and UV exposure
 - d. Luminaire shall include separate control cards to current balance each LED array individually.

B. Control and Monitoring

The control and monitoring system shall be designed, developed and provided by the sports lighting manufacturer and meet the following specifications:

1. Product Features:
 - a. Wired IP control using streaming ACN (sACN)
 - b. Fixture control capability from multiple locations in venue
 - c. Control system remotely through internet access
 - d. Individual fixture control
 - e. Capable of unlimited customizable dynamic and static scenes
 - f. Ability to schedule single or recurring events at fixed times
 - g. Onsite commissioning using a Mobile Application
 - h. Predictive health monitoring system based on 6 or more sensors internal to each individual fixture
 - i. Cloud based control of system
 - j. Web user interface controller to be accessed by LAN
 - k. Capable of in-field firmware/software upgrades
 - l. Ability to remotely commissioning after initial onsite commissioning
 - m. Ability to design custom scenes
 - n. Remote Health Monitoring and diagnostics: Email alerts capable
 - o. Web accessible of cloud-based performance database
 - p. User accounts and permission levels
2. Health Monitoring and Reporting
 - a. Life time run hours
 - b. Life time power consumption
 - c. Power supply temp
 - d. Peak power supply temp
 - e. Average and peak current
 - f. Input Voltage
 - g. Peak Input Voltage
 - h. Average Power
 - i. Life time watt-hours
 - j. Monitor individual fixture signal strength
 - k. Live reporting of CCT beam angle and light output tilt and orientation

- B. Custom Mounting Hardware: Manufacturer shall provide brackets, and hardware for mounting the lighting system to the facility's structural steel.
- C. Safety: All system components shall be UL listed for the appropriate application.

2.2 ELECTRICAL

The electrical system shall meet the following specifications:

- A. Electrical Service: 120-240VAC or 277-480VAC
- B. Maximum total voltage drop: Voltage drop to the disconnect switch located on the poles shall not exceed three (3) percent of the rated voltage.

10-Year Warranty: manufacturer shall supply a signed warranty for 10 years from the date of original shipment.

Approved Product: Cooper's Ephesus Lumadapt G8 fixture and control system is the approved product. All substitutions must provide a complete submittal package for approval, as follows:

Item	Description
Lighting Design	Lighting design drawing(s) showing: <ul style="list-style-type: none"> a. Venue Name, date, file number, prepared by b. Outline of area(s) being lighted, illuminance levels at grid spacing specified c. Mounting height, number of fixtures, aiming angles, as well as luminaire information including wattage, lumens and optics d. Height of light test meter above field surface. e. Summary table showing both horizontal and vertical foot candle levels, the number and spacing of grid points; average, minimum and maximum illuminance levels in foot candles (fc); uniformity including maximum to minimum ratio, coefficient of variance (CV), uniformity gradient (UG); number of luminaires, total system kilowatts; light loss factor.
Photometric Report	A photometric report that shows aiming points to demonstrate the capability of the system to achieve the specified performance.
Photometric Files	IES files for each NEMA configuration specified in the sports lighting design.
Control & Monitoring System	Written definition, control riser and schematics for wireless DMX control system.
Standard Catalog 'Cut' Sheets	Luminaire specification or 'cut' sheets.
Qualifications & Experience	Provide a list of 10 similar projects installed with LED sports lighting. Include project name, location, installation date and reference contact.

PRICING
Sealed Bid
M 03875 EPHEUSUS LIGHTING FOR B. R. RIVER CENTER

The brand and model used in this specification is used only to denote the general style, type, character and quality standard of the supplies requested. Please note the brand and model that you are bidding in the designated spaces provided on the following deviations pages. If bidding other than specified, sufficient information should be enclosed with the bid to in order to determine quality, suitability, compatibility and compliance with the specifications.

ITEM	DESCRIPTION	QUANTITY	UNIT	PRICE	Extended Price
0001	EPHESUSSP EPH-G8-VX-N-PC-BLK-LB	82	EACH	\$_____	\$_____
0002	EPHESUSSP EPH-KTA/ COLOR TEMPERATURE TUNING Required Option	82	EACH	\$_____	\$_____
0003	EPHESUSSP AF-0211/ INSTALL LASER KIT	1	EACH	\$_____	\$_____
0004	EPHESUSSP EPH-G8-BLK-YG-C10-BP/ YOKE MOUNT KIT W/CORD GRIP	82	EACH	\$_____	\$_____
0005	EPHESUSSP EPH-LS-CAT-N-X-U-B/ UNV. CATWALK BRACKET	82	EACH	\$_____	\$_____
0006	EPHESUSSP EPH-CRA-LV-M-POE/ MASTER CORE ROUTER ASSEMBLY	1	EACH	\$_____	\$_____
0007	EPHESUSSP EPH-CRA-LV-S-N/ SECONDARY CORE ROUTER ASSEMBLY	2	EACH	\$_____	\$_____
0008	EPHESUSSP 3S350/ UNINTERRUPTIBLE POWER SUPPLY (UPS)	3	EACH	\$_____	\$_____
0009	EPHESUSSP EPH-FEC-VC/ FRONT END CONTROL SYSTEM	1	EACH	\$_____	\$_____
0010	EPHESUSSP EPH-PSU/ EPEHUS REMOTE PROJECT START UP	1	EACH	\$_____	\$_____
0011	Network Control Equipment PATCH PANEL 24X - 2U 19" rack-mount patch panel with 24 open slots 2100A2008	1	EACH	\$_____	\$_____

0012	Network Control Equipment Cat5e Modular Jack for above Patch Panel N2027	24	EACH	\$_____	\$_____
0013	Network Control Equipment MAP BR1 - 1U Brush Grommet Panel SGE1061	1	EACH	\$_____	\$_____
0014	Network Control Equipment 2' CAT5 Patch cable, black N4035	24	EACH	\$_____	\$_____
0015	Network Control Equipment CISCO SG350-28P - Cisco Switch - 24 RJ-45 ports of 10/100/1000 PoE+ (195W total allowance) - 2 combo ports of RJ-45 or mini-GBIC/SFP - 2 ports of mini-GBIC/SFP SGN1256-M	1	EACH	\$_____	\$_____
0016	Network Control Equipment 6 Outlet Fiber Termination Box N2019	1	EACH	\$_____	\$_____
0017	Network Control Equipment LC Fiber Adapter for Fiber Termination Box - Duplex, 1 adapter required per fiber run SGN1253	4	EACH	\$_____	\$_____
0018	Network Control Equipment LC Patch Cable for use with Fiber Termination box - 2.0M Length - OM3 50/125 10G SGM1612	4	EACH	\$_____	\$_____
0019	Network Control Equipment CISCO MGBSX1 - Mini-GBIC/SFP for Cisco Switch SX Fiber - LC Connector SGN1021	4	EACH	\$_____	\$_____
0020	DIN-RM - 4U 19" rack mount kit for DIN rail products. VCRMKIT includes mounting hardware, ground terminal block, and DIN rail clamp	1	EACH	\$_____	\$_____
0021	Custom Net Box in Catwalk Custom SNB-8 1 - 5 - Port Switch 1 - Power Supply with Surge Suppressor	1	EACH	\$_____	\$_____
0022	Custom Net Box in Catwalk Fiber Term Box VCFIBERDUALDMXBOX	1	EACH	\$_____	\$_____
0023	Custom DMX and Net Floor Level Custom SNB-8 1 - 5 - Port Switch 1 - Power Supply with Surge Suppressor 1 - RSN-DMX4-DIN Gateway	3	EACH	\$_____	\$_____
0024	Custom DMX and Net Floor Level Fiber Term Box VCDMXFIBERBOX	3	EACH	\$_____	\$_____

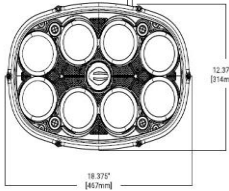
0025	Mosaic Touchscreen M-TS-4 - Mosaic Touchscreen Station with black faceplate and black overlay to include: 1 - 4.3" Touchscreen Control Interface 1 - Ethernet interface for system connection TO BE FITTED INTO PORTABLE CASE WITH NET JACK	2	EACH	\$_____	\$_____
0026	Mosaic Touchscreen MTPC-SBB - Surface-mount Backbox Kit Compatible with Mosaic Tessera and Mosaic Touchscreen hardware	2	EACH	\$_____	\$_____
0027	Mosaic Button Station M108-4-US - Unison Mosaic M108 8-Button Station - Black Metal Bezel 10/100 Base-TX Ethernet PoE Only Fits 1 Gang US RACO back box	1	EACH	\$_____	\$_____
0028	Control Plug-in Stations ECPB NET / NET – ETCNet / ETCNet Control Plug-in Station with: 2 - RJ-45 (568B) Connectors in XLR cases	1	EACH	\$_____	\$_____
0029	Control Plug-in Stations ECPB PB2 - ETC 2-gang Surface Mount Back Box (2.5" deep)	1	EACH	\$_____	\$_____
0030	Control Plug-in Stations ECPB NET - ETCNet Control Plug-in Station with: 1 - RJ-45 (568B) Connector in XLR case	2	EACH	\$_____	\$_____
0031	Control Plug-in Stations ECPB PB1 - ETC 1-gang Surface Mount Back Box (2.5" deep)	2	EACH	\$_____	\$_____
0032	Control Plug-in Stations ECPB DMX IN / DMX IN / NET / NET - DMX Input / DMX Input / Net / Net Control Plug-in Station with: 2 - XLR-5MDM3 DMX In Connectors 2 - RJ-45 (568B) Connector in XLR case	3	EACH	\$_____	\$_____
0033	Control Plug-in Stations 4SBD-4 - ETC 4-gang Surface Mount Back Box (3.5" deep)	3	EACH	\$_____	\$_____
0034	Control Gateways RSN-DMX2-I-P-4 - Response Mk2 Two-port DMX/RDM Portable Gateway to include: - Gateway Electronics with two 5-pin XLR DMX input connectors - Back box with mounting bracket and Ethernet input - Display and 4-button user interface - Black Finish	2	EACH	\$_____	\$_____

Prices are to include Freight and Delivery

SPECIFICATIONS / DEVIATIONS

Page 1 of 12


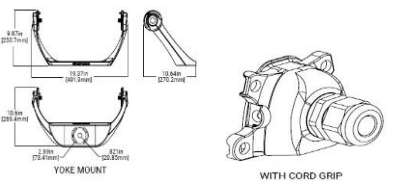
The brand and model used in this specification is used only to denote the general style, type, character and quality standard of the supplies requested. Please note the brand and model that you are bidding in the designated spaces provided. If bidding other than specified, sufficient information should be enclosed with the bid to in order to determine quality, suitability, compatibility and compliance with the specifications.

Item No. 0001	<div>EPHESUSSP EPH-G8-VX-N-PC-BLK-LB OR APPROVED EQUAL</div> <div></div>	Meets Specification		DEVIATION (if applicable)																																																																																																						
		Yes	No																																																																																																							
	<div>Brand: EPH = Ephesus (Cooper Lighting) Product G8 = Lumadapt 8 Voltage: VX = Variable Controlled Optics: N = Narrow LED: PC = Color Tunable White & RGBA Fixture Color: BLK = Black Controls: Landburst</div>	<div>Lumen output up to 50,000 lumens Input wattage/ power supply output wattage 440 watts / 400 watts Input voltage (high voltage) 277-480 VAC. 50 / 60 Hz Input voltage (low voltage) 120-240 VAC, 50/ 60 Hz CCT Range ' 5000K nominal {3000K- 6500K optional) Color lighting Integrated RGBA Lumen Output by Color ' Red 325 Green 1950 Blue 277 Amber 1395 CRI ' >/ = 85 CRI TLCI ' 70 min /7 5 typical TLCI <2 J Dimming range Full range: 1-100% Beam angle NEMA 4 nominal (3-5 optional) Operating temperature range -40 degrees C to +50 degrees C Usage Indoor Mounting options (3G rated)Pendant. yoke Mounting angle 360 degrees / full range Electrical certifications UL 8750, UL 1598 NEMA rating: NEMA 4X Surge 6kV common mode / 4kV differential mode Effective Projected Area 1.4 ft sq Approximate Weight 28 lbs <3 J</div>																																																																																																								
Item No. 0002	<div>EPHESUSSP EPH-KTA/ COLOR TEMPERATURE TUNING (REQUIRED OPTION)</div>	Meets Specification		DEVIATION (if applicable)																																																																																																						
		Yes	No																																																																																																							
<div>Optical Performance Data</div> <table><tr><th>OPTIC</th><th>LED SOURCE COLOR</th><th>NEMATYPE</th><th>CRI</th><th>CCT RANGE</th><th>LUMEN RANGE (Lm)</th><th>INPUT POWER (W)RANGE</th><th>Lm/W RANGE</th><th>BEAM ANGLE RANGE</th><th>FIELD ANGLE RANGE</th></tr><tr><td rowspan="5">NARROW W</td><td>WHITE</td><td>NEMA RANGE 3-5</td><td>85</td><td>3000K - 6500K</td><td>31851-50562</td><td>288-433</td><td>110.5-116.8</td><td>21-55</td><td>36-83</td></tr><tr><td>RED</td><td></td><td>N/ A</td><td>N/ A</td><td>285</td><td>35.7</td><td>8.0</td><td>39.8</td><td>91.5</td></tr><tr><td>GREEN</td><td></td><td>N/ A</td><td>N/A</td><td>200 3</td><td>36.0</td><td>55.6</td><td>42.2</td><td>98.5</td></tr><tr><td>BLUE</td><td></td><td>N/ A</td><td>N/A</td><td>244</td><td>36.2</td><td>6.7</td><td>40.5</td><td>91.7</td></tr><tr><td>AMBER</td><td></td><td>N/ A</td><td>N/A</td><td>1,350</td><td>35.6</td><td>37.9</td><td>40.9</td><td>91.4</td></tr><tr><td rowspan="5">WIDE</td><td>WHITE</td><td>NEMA RANGE 3-5</td><td>85</td><td>3000K - 6500K</td><td>31283-49564</td><td>288-433</td><td>708 . 6-114.5</td><td>50-77</td><td>96-135</td></tr><tr><td>RED</td><td></td><td>N / A</td><td>N/ A</td><td>271</td><td>35.8</td><td>7.6</td><td>69.6</td><td>136.9</td></tr><tr><td>GREEN</td><td></td><td>N / A</td><td>N/ A</td><td>7907</td><td>36.0</td><td>53.0</td><td>70.1</td><td>137.0</td></tr><tr><td>BLUE</td><td></td><td>N/ A</td><td>N/ A</td><td>230</td><td>36.2</td><td>6.4</td><td>74.0</td><td>140.8</td></tr><tr><td>AMBER</td><td></td><td>N/ A</td><td>N/ A</td><td>1288</td><td>35.6</td><td>36.2</td><td>70.4</td><td>136.4</td></tr></table>					OPTIC	LED SOURCE COLOR	NEMATYPE	CRI	CCT RANGE	LUMEN RANGE (Lm)	INPUT POWER (W)RANGE	Lm/W RANGE	BEAM ANGLE RANGE	FIELD ANGLE RANGE	NARROW W	WHITE	NEMA RANGE 3-5	85	3000K - 6500K	31851-50562	288-433	110.5-116.8	21-55	36-83	RED		N/ A	N/ A	285	35.7	8.0	39.8	91.5	GREEN		N/ A	N/A	200 3	36.0	55.6	42.2	98.5	BLUE		N/ A	N/A	244	36.2	6.7	40.5	91.7	AMBER		N/ A	N/A	1,350	35.6	37.9	40.9	91.4	WIDE	WHITE	NEMA RANGE 3-5	85	3000K - 6500K	31283-49564	288-433	708 . 6-114.5	50-77	96-135	RED		N / A	N/ A	271	35.8	7.6	69.6	136.9	GREEN		N / A	N/ A	7907	36.0	53.0	70.1	137.0	BLUE		N/ A	N/ A	230	36.2	6.4	74.0	140.8	AMBER		N/ A	N/ A	1288	35.6	36.2	70.4	136.4
OPTIC	LED SOURCE COLOR	NEMATYPE	CRI	CCT RANGE	LUMEN RANGE (Lm)	INPUT POWER (W)RANGE	Lm/W RANGE	BEAM ANGLE RANGE	FIELD ANGLE RANGE																																																																																																	
NARROW W	WHITE	NEMA RANGE 3-5	85	3000K - 6500K	31851-50562	288-433	110.5-116.8	21-55	36-83																																																																																																	
	RED		N/ A	N/ A	285	35.7	8.0	39.8	91.5																																																																																																	
	GREEN		N/ A	N/A	200 3	36.0	55.6	42.2	98.5																																																																																																	
	BLUE		N/ A	N/A	244	36.2	6.7	40.5	91.7																																																																																																	
	AMBER		N/ A	N/A	1,350	35.6	37.9	40.9	91.4																																																																																																	
WIDE	WHITE	NEMA RANGE 3-5	85	3000K - 6500K	31283-49564	288-433	708 . 6-114.5	50-77	96-135																																																																																																	
	RED		N / A	N/ A	271	35.8	7.6	69.6	136.9																																																																																																	
	GREEN		N / A	N/ A	7907	36.0	53.0	70.1	137.0																																																																																																	
	BLUE		N/ A	N/ A	230	36.2	6.4	74.0	140.8																																																																																																	
	AMBER		N/ A	N/ A	1288	35.6	36.2	70.4	136.4																																																																																																	

SPECIFICATIONS / DEVIATIONS

Page 2 of 12

The brand and model used in this specification is used only to denote the general style, type, character and quality standard of the supplies requested. Please note the brand and model that you are bidding in the designated spaces provided. If bidding other than specified, sufficient information should be enclosed with the bid to in order to determine quality, suitability, compatibility and compliance with the specifications.

Item No. 0003	EPHESUSSP AF-0211/ INSTALL LASER KIT 		Meets Specification		DEVIATION (if applicable)	
			Yes	No		
Calibrated laser tool for aiming the light fixtures Aiming the luminaires is a critical part of the LED lighting solution to ensure that light is evenly distributed on the playing surface. There are two basic methods to properly aim a sports venue – Precision Laser Aiming by Coordinates, and Orient Tilt. Aiming tool should be for fixtures bid on Item No. 0001			– Laser aiming is the most effective and preferred technique for aiming Ephesus LED sports lighting. This method uses a laser mounted to the luminaire to point the fixture at a predetermined point on the playing surface using (X,Y) coordinates			
Item No. 0004	EPHESUSSP EPH-G8-BLK-YG-C10-BP/ YOKE MOUNT KIT W/CORD GRIP 		Meets Specification		DEVIATION (if applicable)	
			Yes	No		
Brand	Product	Fixture Color	Mounting and Junction Box Connection'		Power Cable	Packaging
EPH•Ephesus	GS• Lumada pt 8	BLK•Slack WHT•White	PG•Pendant mount with cord grip PC•Pendant mount with conduit fitting YG•Yoke mount with cord grip YC•Yoke mount with conduit fitting		NPC•No power cable C10• 10' cable	BP•Bulk Packaging'
			Notes			Notes
			(1) Junction box not shown. Ordering fixtures without accessories and junction box will result in loss of NEMA 4X & IP66 rating			(1) Six items come in each bulk package
Item No. 0005	EPHESUSSP EPH-LS-CAT-N-X-U-B/ UNV. CATWALK BRACKET		Meets Specification		DEVIATION (if applicable)	
			Yes	No		
Brand	Family	Accessory	Driver Box	Fixture Brackets	Railing Mount Type	Coating
EPH = Ephesus	LS = LumaSport	CAT = Catwalk Bracket	P = With Driver Box Mount N = Without Driver Box Mount	2 = Double B = Bottom Only T = Top Only	U = 7-2 In. round or rectangular railing ¹	B = Black Powder Coating'
DIAGRAMS ON NEXT PAGE					Notes: (1) If another size railing is required, please contact for additional options	Notes: (2) B = Black Powder Coating designed for indoor use.

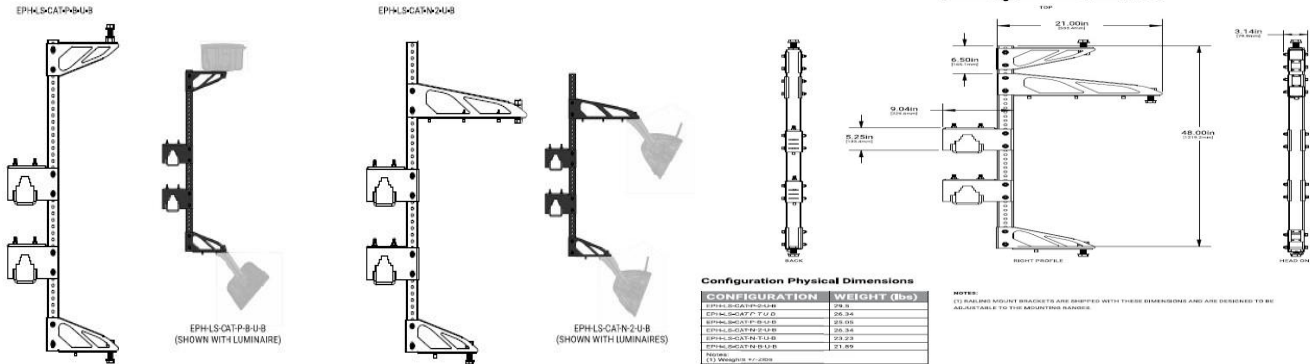
SPECIFICATIONS / DEVIATIONS

Page 3 of 12

The brand and model used in this specification is used only to denote the general style, type, character and quality standard of the supplies requested. Please note the brand and model that you are bidding in the designated spaces provided. If bidding other than specified, sufficient information should be enclosed with the bid to in order to determine quality, suitability, compatibility and compliance with the specifications.

Catwalk Bracket Configurations

Catwalk Bracket Dimensional Details


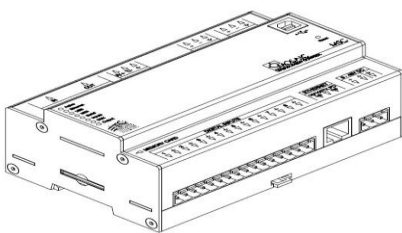


Item No.	EPHESUSSP EPH-CRA-LV-M-POE/ MASTER CORE ROUTER ASSEMBLY	Meets Specification		DEVIATION (if applicable)
		Yes	No	
0006	<p>Technical Specifications</p> <p>Power Requirements • 120 to 240 VAC • 15W without PoE • 50W with PoE</p> <p>Peripheral Connectivity PoE Option: • 7 x RJ45, 10/100 Ethernet • 1 x RJ45, 10/100 Ethernet, PoE+ • 2 x Duplex LC, Gigabit Fiber</p> <p>Non PoE Option • 8 x RJ45, 10/100 Ethernet • 2 x Duplex LC, Gigabit Fiber</p> <p>Dimensions • 12" x 12" x 8.4" (305 mm x 305 mm x 213mm)</p> <p>Operating Temperature • -40°C to +45°C</p> <p>Operating Humidity • 0 to 95%, non-condensing</p> <p>Environmental Rating • NEMA 1 (indoor)</p> <p>Mounting • Mounting feet on enclosure (See dimensions on page 1)</p> <p>Product Safety • UL 508A</p>			<p>Master CRA (-M) System performance Maximum Fixture Count • 24: 3 strings of 8 fixtures • 15W without PoE • 50W with PoE</p> <p>Additional Supported Devices • Lumadapt Core • Local Streaming ACN (sACN) Controller (Lumadapt Scene Player) • LAN connection (Lumadapt Cloud) • PoE+ Device (-PoE option)</p> <p>Secondary CRA (-S) System performance Maximum Fixture Count • 64: 8 strings of 8 fixtures Additional Supported Devices • None</p>
0007	<p>EPHESUSSP EPH-CRA-LV-S-N/ SECONDARY CORE ROUTER ASSEMBLY</p>			<p>DEVIATION (if applicable)</p>
<p>Secondary Routers have same specifications as the Master Router</p> <p>Technical Specifications</p> <p>Power Requirements • 120 to 240 VAC • 15W without PoE • 50W with PoE</p> <p>Peripheral Connectivity PoE Option: • 7 x RJ45, 10/100 Ethernet • 1 x RJ45, 10/100 Ethernet, PoE+ • 2 x Duplex LC, Gigabit Fiber</p> <p>Non PoE Option • 8 x RJ45, 10/100 Ethernet • 2 x Duplex LC, Gigabit Fiber</p> <p>Dimensions • 12" x 12" x 8.4" (305 mm x 305 mm x 213mm)</p>		<p>Master CRA (-M) System performance Maximum Fixture Count • 24: 3 strings of 8 fixtures • 15W without PoE • 50W with PoE</p> <p>Additional Supported Devices • Lumadapt Core • Local Streaming ACN (sACN) Controller (Lumadapt Scene Player) • LAN connection (Lumadapt Cloud) • PoE+ Device (-PoE option)</p> <p>Secondary CRA (-S) System performance Maximum Fixture Count • 64: 8 strings of 8 fixtures Additional Supported Devices • None</p>		

SPECIFICATIONS / DEVIATIONS

Page 4 of 12

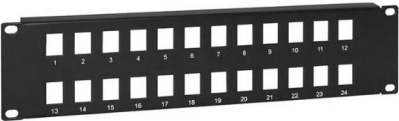

The brand and model used in this specification is used only to denote the general style, type, character and quality standard of the supplies requested. Please note the brand and model that you are bidding in the designated spaces provided. If bidding other than specified, sufficient information should be enclosed with the bid to in order to determine quality, suitability, compatibility and compliance with the specifications.

Item No. 0008	EPHESUSSP 3S350/ UNINTERRUPTIBLE POWER SUPPLY (UPS) 	Meets Specification		DEVIATION (if applicable)
		Yes	No	
Uninterruptible Power Supply, 350 VA to 750 VA, 8 to 10 Outlets (Battery Backup and Surge Protection Only)				
Item No. 0009	EPHESUSSP EPH-FEC-VC/ FRONT END CONTROL SYSTEM MSC2 Unison Mosaic 1024 Channel Show Controller 	Meets Specification		DEVIATION (if applicable)
		Yes	No	
MSC2 Unison Mosaic 1024 Channel Show Controller Support for DMX512/RDM, sACN, ETC Net2™, KiNet, Pathport, or Art-Net II output -- One protocol may be used for each 512-channel segment <ul style="list-style-type: none">Integrated real and astronomical time clockTriggering and show-control integration using Ethernet, RS232/485, DMX, MIDI and digital/analog inputsIntegrated web server for remote managementProgrammed and configured using Unison Mosaic Designer SoftwareSimple integration with other Mosaic devices for large systems, including the MSC X		MECHANICAL <ul style="list-style-type: none">Eight-unit-wide DIN EnclosureMounting complies with DIN43880 and EN60715 (35/7.5 rail)All connections use standard pluggable connectors ELECTRICAL <ul style="list-style-type: none">9V to 48V DC power inputSupports PoE power input (IEEE 802.3af)Isolated DMX512 portsRDM CompatibleEight individually selectable digital or analog inputs -- Supports active high, active low, or contact closure10/100Base-TX Ethernet using RJ45 connectionUSB using USB-B connectionRS232/485 Serial or DMX triggering using 3-pin connectorMIDI input using 5-pin DIN connectorMIDI output using 5-pin DIN connectorETL and cETL Listed, CE Compliant THERMAL <ul style="list-style-type: none">Ambient temperature: 0-50°C / 32-122°F		

SPECIFICATIONS / DEVIATIONS

Page 5 of 12





The brand and model used in this specification is used only to denote the general style, type, character and quality standard of the supplies requested. Please note the brand and model that you are bidding in the designated spaces provided. If bidding other than specified, sufficient information should be enclosed with the bid to in order to determine quality, suitability, compatibility and compliance with the specifications.

Item No. 0010	EPHESUSSP EPH-PSU/ EPEHUS REMOTE PROJECT START UP	Meets Specification <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;">Yes</td> <td style="width: 50%; text-align: center;">No</td> </tr> <tr> <td style="height: 20px;"></td> <td style="height: 20px;"></td> </tr> </table>	Yes	No			DEVIATION (if applicable)
Yes	No						
<ol style="list-style-type: none"> 1. This is a solution that will provide the ability to upgrade over time to meet evolving needs of the facility to include dimming, CCT tuning, beam tuning, integral RGBA color flooding, continuous health monitoring, two-way communication, individual fixture control and firmware/software upgradeable. 2. Maintain light levels: selection of appropriate light levels impact the safety of the players and the enjoyment of spectators. Therefore, specified minimum average illumination must be maintained for a period of 10 years. 3. Life-cycle cost: In order to reduce operating costs, the preferred lighting system shall be energy efficient and cost effective to operate. Accordingly, efficacy should be a minimum of 115 lumens/watt between 4000K-5600K. 4. Control and monitoring: the control and monitoring system shall be based on streaming ACN internet protocols (IP) which provides individual fixture control and on-site scene building capability. In addition, controls capable of on/off/dim and individual light control to reduce energy consumption. 5. House control systems: ability to connect with in house facility controls. 6. Design Validation: Manufacturer shall provide IES files for design verification and consultation 							
Item No. 0011	Network Control Equipment PATCH PANEL 24X - 2U 19" rack-mount patch panel with 24 open slots 	Meets Specification <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;">Yes</td> <td style="width: 50%; text-align: center;">No</td> </tr> <tr> <td style="height: 40px;"></td> <td style="height: 40px;"></td> </tr> </table>	Yes	No			DEVIATION (if applicable)
Yes	No						
Specifications: <div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> Premium CAT5E, CAT6, CAT6A Blank Patch Panel Reinforced steel with pre-numbered ports Ethernet 24-Ports (2U) Uses any Keystone style jack or insert Made From High-Grade 16 Gauge Thick Rolled-Edge Panel 19" Rack and enclosure mountable Designed to support the distribution of voice, data, audio, video, and fiber optic needs for commercial or residential applications </div> <div style="width: 48%;"> Ports: 24 Ports Dimensions: 19"(W) x 3.5"(H) Rack Spaces: 2U Color: Black </div> </div>							
Item No. 0012	Cat5E Modular Keystone Jack 	Meets Specification <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: center;">Yes</td> <td style="width: 50%; text-align: center;">No</td> </tr> <tr> <td style="height: 20px;"></td> <td style="height: 20px;"></td> </tr> </table>	Yes	No			DEVIATION (if applicable)
Yes	No						
Cat5E EZ Modular Keystone Jack is an 8-position, 8-conductor (8P8C) modular connector. It provides outstanding performance and reliability and supports up to Gigabit Ethernet applications. These keystone jacks are easy to terminate, simplifying installation and reducing work time.							

SPECIFICATIONS / DEVIATIONS

Page 6 of 12




The brand and model used in this specification is used only to denote the general style, type, character and quality standard of the supplies requested. Please note the brand and model that you are bidding in the designated spaces provided. If bidding other than specified, sufficient information should be enclosed with the bid to in order to determine quality, suitability, compatibility and compliance with the specifications.

Item No. 0013	Network Control Equipment MAP BR1 - 1U Brush Grommet Panel 	Meets Specification		DEVIATION (if applicable)
		Yes	No	
Type: Rackmount Cable Holder Rack Spaces: 1U Quantity: Single Dimensions: 19" x 2.92" x 1.75" Material: Steel with Black Powder Coat Manufacturer Part Number: BR1 SEG1256-M				
Item No. 0014	Network Control Equipment 2' CAT5 Patch cable, black 	Meets Specification		DEVIATION (if applicable)
		Yes	No	
Cat5e High Flex RJ45 Double Shielded Ethernet Cables in 2 foot lengths				
Item No. 0015	Network Control Equipment CISCO SG350-28P - Cisco Switch 	Meets Specification		DEVIATION (if applicable)
		Yes	No	
SG350-28P Cisco Small Business SG350-28P Managed L3 Switch - 24 POE+ Ethernet Ports & 2 Combo Gigabit SFP Ports & 2 Gigabit SFP Ports 24 RJ-45 ports of 10/100/1000 PoE+ (195W total allowance) - 2 combo ports of RJ-45 or mini-GBIC/SFP - 2 ports of mini-GBIC/SFP				
Item No. 0016	Network Control Equipment 6 Outlet Fiber Termination Box 	Meets Specification		DEVIATION (if applicable)
		Yes	No	
N2019 6 Outlet Fiber Termination Box				

SPECIFICATIONS / DEVIATIONS

Page 7 of 12

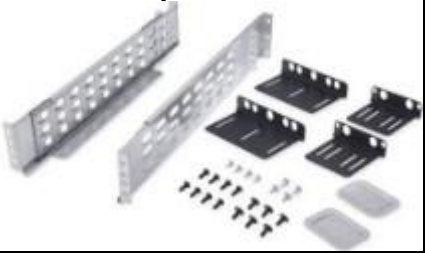
The brand and model used in this specification is used only to denote the general style, type, character and quality standard of the supplies requested. Please note the brand and model that you are bidding in the designated spaces provided. If bidding other than specified, sufficient information should be enclosed with the bid to in order to determine quality, suitability, compatibility and compliance with the specifications.

Item No. 0017	Network Control Equipment LC Fiber Adapter for Fiber Termination Box - Duplex, 1 adapter required per fiber run 	Meets Specification		DEVIATION (if applicable)
		Yes	No	
MATERIALS: SLEEVE: CERAMIC BODY: ABS THERMOPLASTIC, BLUE DUST CAP: ENGINEERING PLASTIC, WHITE MOUNTING CLIPS: STAINLESS STEEL RECOMMENDED PANEL THICKNESS: .06" [1.5] ALL DIMENSIONS ARE FOR REFERENCE ONLY SGN1253				
Item No. 0018	Network Control Equipment LC Patch Cable for use with Fiber Termination box - 2.0M Length - OM3 50/125 10G 	Meets Specification		DEVIATION (if applicable)
		Yes	No	
LC/LC 10GB 50/125 Multimode Simplex Fiber Patch Cable - OM3 - 2 Meter 50 Microns				
Item No. 0019	Network Control Equipment CISCO MGBSX1 - Mini-GBIC/SFP for Cisco Switch SX Fiber - LC Connector 	Meets Specification		DEVIATION (if applicable)
		Yes	No	
MGBSX1 - Cisco Linksys Multi-mode 1Gbps 1000Base-SX Fiber 550nm wavelength Duplex LC Connector SFP (mini-GBIC) Transceiver Module Small form-factor Pluggable SGN1021				

SPECIFICATIONS / DEVIATIONS

Page 8 of 12


The brand and model used in this specification is used only to denote the general style, type, character and quality standard of the supplies requested. Please note the brand and model that you are bidding in the designated spaces provided. If bidding other than specified, sufficient information should be enclosed with the bid to in order to determine quality, suitability, compatibility and compliance with the specifications.

Item No. 0020	DIN-RM - 4U 19" rack mount kit for DIN rail products. includes mounting hardware, ground terminal block, and DIN rail clamps	Meets Specification		DEVIATION (if applicable)
		Yes	No	
				
RACK MOUNT KIT VCRMKIT				
Item No. 0021	Custom Net Box in Catwalk Custom SNB-8	Meets Specification		DEVIATION (if applicable)
		Yes	No	
1 - 5 - Port Switch 1 - Power Supply with Surge Suppressor				
Item No. 0022	Custom Net Box in Catwalk Fiber Term Box VCFIBERDUALDMXBOX	Meets Specification		DEVIATION (if applicable)
		Yes	No	
Custom Item Custom SNB-8 1 - 5 - Port Switch 1 - Power Supply with Surge Suppressor Custom Item Fiber Term Box TBD ON AVAILABILITY 4-PORT DMX GATEWAYS				
Item No. 0023	Custom DMX and Net Floor Level Custom SNB-8 1 - RSN-DMX4-DIN Gateway	Meets Specification		DEVIATION (if applicable)
		Yes	No	
Custom SNB-8 1 - 5 - Port Switch 1 - Power Supply with Surge Suppressor 1 - RSN-DMX4-DIN Gateway				
Item No. 0024	Custom DMX and Net Floor Level Fiber Term Box VCFIBERDUALDMXBOX	Meets Specification		DEVIATION (if applicable)
		Yes	No	
Custom Item Fiber Term Box TBD ON AVAILABILITY 4-PORT DMX GATEWAYS				

SPECIFICATIONS / DEVIATIONS

Page 9 of 12


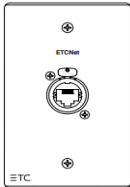
The brand and model used in this specification is used only to denote the general style, type, character and quality standard of the supplies requested. Please note the brand and model that you are bidding in the designated spaces provided. If bidding other than specified, sufficient information should be enclosed with the bid to in order to determine quality, suitability, compatibility and compliance with the specifications.

Item No.	Mosaic Touchscreen M-TS-4 – Black RAL 9004	Meets Specification		DEVIATION (if applicable)
		Yes	No	
0025				
Mosaic Touchscreen Station with black faceplate and black overlay to include: 1 - 4.3" Touchscreen Control Interface capacitive touch display 480 x 272 resolution, 24-bit color 1 - Ethernet interface for system connection TO BE FITTED INTO PORTABLE CASE WITH NET JACK FEATURES Touch screen is 3.35" or 85 mm High, 5.75" or 146 mm wide, and 0.40" or 10 mm deep Compatible with all Mosaic controllers Configurable user Interface supports buttons, faders, and color pickers Programmed and configured using Mosaic Designer Software RJ45 socket supporting 10/100Base-TX Ethernet with link and data LED with Static and DHCP addressing support PoE powered (IEEE 802.3af, Class 2) 4W typical draw ETL and cETL LISTED, CE Compliant REGULATORY AND COMPLIANCE cETLus Listed -- Conforms to UL-60950-1 -- Certified to CAN/CSA-C22.2 No. 60950-1 CE Compliant California Title 20/24 compliant				
Item No.	Mosaic Touchscreen MTPC-SBB - Surface-mount Backbox Kit Compatible with Mosaic Tessera and Mosaic Touchscreen hardware	Meets Specification		DEVIATION (if applicable)
		Yes	No	
0026				
Box should be Compatible with all Mosaic controllers Touch screen is 3.35" or 85 mm High, 5.75" or 146 mm wide, and 0.40" or 10 mm deep				

SPECIFICATIONS / DEVIATIONS

Page 10 of 12

The brand and model used in this specification is used only to denote the general style, type, character and quality standard of the supplies requested. Please note the brand and model that you are bidding in the designated spaces provided. If bidding other than specified, sufficient information should be enclosed with the bid to in order to determine quality, suitability, compatibility and compliance with the specifications.

Item No.	Mosaic Button Station M108-4-US - Unison Mosaic M108 1 Gang, 8-Button Station	Meets Specification		DEVIATION (if applicable)
		Yes	No	
0027				
Black Metal Bezel 10/100 Base-TX Ethernet PoE Only Fits 1 Gang US RACO back box Eight programmable buttons White LED button indicators with intensity control RJ45 connection for 10/100Base-TX Ethernet with link and data LED with Static and DHCP addressing support PoE powered (IEEE 802.3af, Class 1) 1.5W typical draw Power-over-Ethernet (PoE) Networking to Mosaic controllers Built in IR receiver with support for 3rd party remote Programmed and configured using Mosaic Designer Software REGULATORY AND COMPLIANCE cETLus Listed -Conforms to UL-60950-1 -Certified to CAN/CSA-C22.2 No. 60950-1 CE Compliant California Title 20/24 compliant				
Item No.	Control Plug-in Stations ECPB NET / NET – ETC Net / ETC Net Control Plug-in Station Single RJ-45 Connector shown	Meets Specification		DEVIATION (if applicable)
		Yes	No	
0028				
2 ea.- RJ-45 (568B) Connectors in XLR cases 2 gang station ECPB NET/NET Dual Ethernet Plug-in Station Flush-mount Box, RACO 691 or equivalent Wall Plate Dims.in inches 4.56"W x 4.5"H x 2.5" deep Wall plates made from 0.80" aluminum • Finished in fine texture, scratch-resistant black powder coat				

SPECIFICATIONS / DEVIATIONS

Page 11 of 12


The brand and model used in this specification is used only to denote the general style, type, character and quality standard of the supplies requested. Please note the brand and model that you are bidding in the designated spaces provided. If bidding other than specified, sufficient information should be enclosed with the bid to in order to determine quality, suitability, compatibility and compliance with the specifications.

Item No. 0029	Control Plug-in Stations ECPB PB2 - ETC 2-gang Surface Mount Back Box (2.5" deep)	Meets Specification		DEVIATION (if applicable)
		Yes	No	
Surface Mount Back Box (2.5" deep) for 2 gang plug in station ETC part # 1064A1024				
Item No. 0030	Control Plug-in Stations ECPB NET – ETC Net Control Plug-in Station	Meets Specification		DEVIATION (if applicable)
		Yes	No	
1 - RJ-45 (568B) Connector in XLR case ETC 1-gang 2.5" Deep Back Box Surface Mount Flush-mount box, RACO 690 or equivalent				
Item No. 0031	Control Plug-in Stations ECPB PB1 - ETC 1-gang Surface Mount Back Box (2.5" deep)	Meets Specification		DEVIATION (if applicable)
		Yes	No	
Surface Mount Back Box (2.5" deep) for single gang plug in station ETC part # 1064A1023				
Item No. 0032	Control Plug-in Stations ECPB DMX IN / DMX IN / NET / NET - DMX Input / DMX Input / Net / Net	Meets Specification		DEVIATION (if applicable)
		Yes	No	
Control Plug-in Station with: 2 – XLR - 5MDM3 DMX In Connectors AND 2 - RJ-45 (568B) Connector in XLR case				
Item No. 0033	Control Plug-in Stations 4SBD-4 - ETC 4-gang Surface Mount Back Box (3.5" deep)	Meets Specification		DEVIATION (if applicable)
		Yes	No	
ETC 4-gang 3.5" Deep Back Box Surface Mount Part # 1064A1040				

SPECIFICATIONS / DEVIATIONS

Page 12 of 12

The brand and model used in this specification is used only to denote the general style, type, character and quality standard of the supplies requested. Please note the brand and model that you are bidding in the designated spaces provided. If bidding other than specified, sufficient information should be enclosed with the bid to in order to determine quality, suitability, compatibility and compliance with the specifications.

Item No. 0034	Control Gateways RSN-DMX2-I-P-4 - Response Mk2 Two-port DMX/RDM Portable Gateway	Meets Specification		DEVIATION (if applicable)
		Yes	No	
				
to include: <ul style="list-style-type: none"> - Gateway Electronics with two 5-pin XLR DMX input connectors - Back box with mounting bracket and Ethernet input - Display and 4-button user interface - Black Finish Supports Net3/ACN (ANSI E1.31 and E1.17) <ul style="list-style-type: none"> • Supports RDM (ANSI E1.20) • Supports USITT DMX512-A (ANSI E1.11) • USITT DMX512 and ANSI E1.11 DMX512-A compliant • Flexible Output Patch allows a 512-address universe to begin at any output address • Advanced Input Patch • Support for per-address- or per-universe-level priority • Maximum delay time from input to output not greater than one packet time • Selectable DMX refresh rate with a maximum at least 40Hz • Supports up to 256 total RDM devices 				

**BIDDER'S ORGANIZATION
BIDDER IS:**

AN INDIVIDUAL

Individual's Name: _____

Doing business as: _____

Address: _____

Telephone No.: _____ Fax No.: _____

A PARTNERSHIP

Firm Name: _____

Address: _____

Name of person authorized to sign: _____

Title: _____

Telephone No.: _____ Fax No.: _____

A LIMITED LIABILITY COMPANY

Company Name: _____

Address: _____

Name of person authorized to sign: _____

Title: _____

Telephone No.: _____ Fax No.: _____

A CORPORATION

**IF BID IS BY A CORPORATION, THE CORPORATE RESOLUTION SHOULD BE SUBMITTED
WITH BID**

Corporation Name: _____

Address: _____

State of Incorporation: _____

Name of person authorized to sign: _____

Title: _____

Telephone No.: _____ Fax No.: _____

IF BID IS BY A JOINT VENTURE, ALL PARTIES TO THE BID SHOULD COMPLETE THIS FORM

CORPORATE RESOLUTION

A meeting of the Board of Directors of _____ a corporation organized under the laws of the State of _____ and domiciled in _____ was held this _____ day of _____, 20 ____ and was attended by a quorum of the members of the Board of Directors.

The following resolution was offered, duly seconded and after discussion was unanimously adopted by said quorum:

BE IT RESOLVED, that _____ is hereby authorized to submit proposals and execute agreements on behalf of this corporation with the City of Baton Rouge, and Parish of East Baton Rouge.

BE IT FURTHER RESOLVED, that said authorization and appointment shall remain in full force and effect, unless revoked by resolution of this Board of Directors and that said revocation will not take effect until the Purchasing Director of the Parish of East Baton Rouge, shall have been furnished a copy of said resolution, duly certified.

I, _____, hereby certify that I am the Secretary of _____, a corporation created under the laws of the State of _____ domiciled in _____; that the foregoing is a true and exact copy of a resolution adopted by a quorum of the Board of Directors of said corporation at a meeting legally called and held on the _____ day of _____, 20 _____, as said resolution appears of record in the Official Minutes of the Board of Directors in my possession.

This _____ day of _____, 20 _____.

SECRETARY